

Patent claims

1. Cage (1) having a plurality of cutouts (2) for receiving rolling bodies (3) of a joint (4),
5 characterized in that the entire cage (1) has a substantially uniform ductility.
2. Cage (1) according to Claim 1, characterized in that the cage (1) has a hardness in the range from 500
10 to 650 HV.
3. Cage (1) according to Claim 1 or 2, characterized in that the cage (1) comprises a quenched and tempered steel.
15
4. Cage (1) according to one of the preceding claims, characterized in that the cage (1) comprises a steel with a carbon content in the range from 0.3% to 0.5%.
- 20 5. Cage (1) according to one of the preceding claims, characterized in that the cage (1) comprises a steel with at least boron as alloying element.
6. Process for producing a cage (1) having a plurality of cutouts (2) for receiving rolling bodies (3) of a joint (4), comprising at least the following steps:
25 - forming a closed base body (5);
- cutting out a plurality of cutouts (2);
30 - fully hardening the cage (1);
- tempering the cage (1).
7. Process according to Claim 6, characterized in that the step of fully hardening comprises at least one of the following means for heating the cage (1): inductive heating, heating by an energy beam, heating by means of a continuous furnace or chamber furnace.
35

8. Process according to Claim 6 or 7, characterized in that the tempering leads to a hardness of the cage (1) in the range from 500 to 650 HV.

5 9. Process according to one of Claims 6 to 8, characterized in that the tempering of the cage (1) is carried out at least by means of:

- immersion in a warm liquid, or
- passage through at least one continuous furnace or

10 chamber furnace.

10. Joint (4) comprising an outer part (6), an inner part (7), a plurality of rolling bodies (3) and a cage (1), the cage (1) being designed as described in one of 15 Claims 1 to 5 or produced by a process according to one of Claims 6 to 9.

11. Joint (4) according to Claim 10, characterized in that it provides an inclination angle (8) for a shaft 20 (9) of greater than 20°.

12. Vehicle (10) comprising a joint (4) according to Claim 10 or 11.